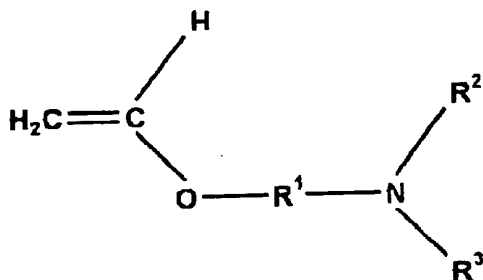


What is claimed is:

1. An antimicrobial copolymer, obtainable by
copolymerizing a vinyl ether of the general
formula



- where R^1 is a branched or unbranched
hydrocarbon radical having from 1 to 5
carbon atoms, and
 R^2 is H, and
 R^3 is H or a branched or unbranched
hydrocarbon radical having from 1 to 5
carbon atoms,

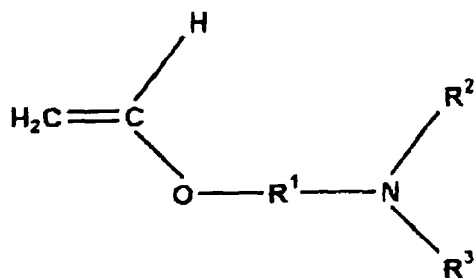
with at least one aliphatically unsaturated
monomer.

2. An antimicrobial polymer as claimed in claim 1,
wherein
the vinyl ether used comprises 3-aminopropyl vinyl
ether.
3. An antimicrobial polymer as claimed in claim 1 or
2,
wherein
the aliphatically unsaturated monomers are
methacrylic acid compounds.
4. An antimicrobial polymer as claimed in claim 1 or
2,

wherein

the aliphatically unsaturated monomers are acrylic acid compounds.

- 5 5. An antimicrobial polymer as claimed in claim 1 or 2,
wherein
the aliphatically unsaturated monomers used are
methyl methacrylate, ethyl methacrylate, butyl
10 methacrylate, tert-butyl methacrylate, methyl
acrylate, ethyl acrylate, butyl acrylate, tert-
butyl acrylate, tert-butylaminoethyl esters,
2-diethylaminoethyl methacrylate, 2-diethyl-
15 aminoethyl vinyl ether, N-3-dimethylamino-
propylmethacrylamide, 3-methacryloylaminopropyl-
trimethylammonium chloride, 2-
methacryloyloxyethyltrimethylammonium chloride or
2-methacryloyloxyethyltrimethylammonium
20 methosulfate.
6. An antimicrobial polymer as claimed in any one of
claims 1 to 5,
wherein
the copolymerization is carried out on a
25 substrate.
7. An antimicrobial coating of a substrate,
wherein
vinyl ethers of the general formula
- 30



where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and

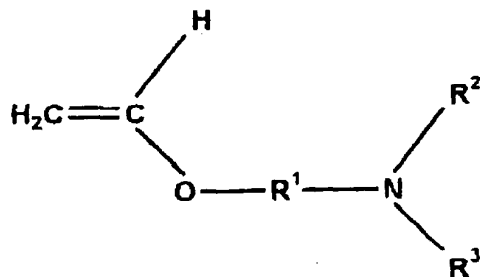
5 R^2 and R^3 are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R^2 and R^3 may be identical or different,

10 are copolymerized in graft polymerization of a substrate.

8. An antimicrobial coating as claimed in claim 7, wherein
15 the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ -radiation.

9. An antimicrobial coating as claimed in claim 7, wherein
20 the substrate is activated, prior to the graft polymerization, by UV radiation with a photoinitiator.

25 10. A process for preparing antimicrobial copolymers, which comprises copolymerizing a vinyl ether of the general formula



where R^1 is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms,

R^2 is H, and

5 R^3 is H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms,

10 with at least one aliphatically unsaturated monomer.

11. The process as claimed in claim 10,
wherein
the vinyl ether used comprises 3-aminopropyl vinyl
15 ether.

12. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers are
20 methacrylic acid compounds.

13. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers are acrylic
25 acid compounds.

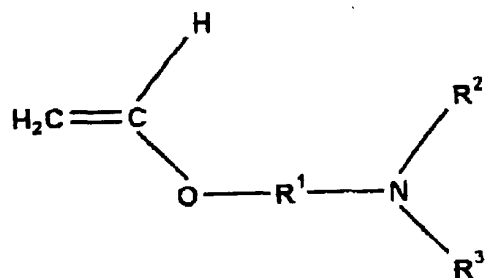
14. The process as claimed in claim 10 or 11,
wherein
the aliphatically unsaturated monomers used are
30 methyl methacrylate, ethyl methacrylate, butyl
methacrylate, tert-butyl methacrylate, methyl
acrylate, ethyl acrylate, butyl acrylate, tert-
butyl acrylate, tert-butylaminoethyl esters,
2-diethylaminoethyl methacrylate, 2-diethylamino-
35 ethyl vinyl ether, N-3-dimethylaminopropyl-
methacrylamide, 3-methacryloylaminopropyltri-
methyllammonium chloride, 2-
methacryloyloxyethyltrimethylammonium chloride or

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2-methacryloyloxyethyltrimethylammonium
methosulfate.

15. The process as claimed in any one of claims 10 to
14,
wherein
the copolymerization is carried out on a
substrate.

16. A process for preparing an antimicrobial coating
of a substrate,
which comprises
copolymerizing vinyl ethers of the general formula



where R^1 is a branched or unbranched
hydrocarbon radical having from 1 to 5
carbon atoms, and
 R^2 and R^3 are H or a branched or
unbranched hydrocarbon radical having
from 1 to 5 carbon atoms, where R^2 and R^3
may be identical or different,

in graft polymerization of a substrate.

17. The process as claimed in claim 16,
wherein
the substrate is activated prior to the graft
polymerization by UV radiation, plasma treatment,
corona treatment, flame treatment, ozonization,
electrical discharge or γ -radiation.

18. The process as claimed in claim 16,
wherein
the substrate is activated prior to the graft
polymerization by UV radiation with a
photoinitiator.
19. The use of the antimicrobial polymers as claimed
in any of claims 1 to 9 for producing products
with an antimicrobial coating of the polymer.
20. The use of the antimicrobial polymers as claimed
in any one of claims 1 to 9 for producing medical
items with an antimicrobial coating of the
polymer.
21. The use of the antimicrobial polymers as claimed
in any one of claims 1 to 9 for producing hygiene
items with an antimicrobial coating of the
polymer.
22. The use of the antimicrobial polymers as claimed
in any one of claims 1 to 9 in surface coatings,
protective paints or other coatings.

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